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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>23 October 2009</u>.
2a)☐ This action is **FINAL**.          2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>See Continuation Sheet</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-6, 10-15, 17-18, 20-21, 23-24, 26, 28-31, 33-35, 37-44, 46-52, and 58-61</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
        1.☐ Certified copies of the priority documents have been received.
        2.☐ Certified copies of the priority documents have been received in Application No. _____.
        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

Continuation of Disposition of Claims: Claims pending in the application are 1-6,10-15,17,18,20,21,23,24,26,28-31,33-35,37-44,46-52 and 58-61.

# DETAILED ACTION

## *Election/Restrictions*

1.      Claims 68-75 were withdrawn from further consideration pursuant to 37 CFR

1.142(b) as being drawn to a nonelected species, there being no allowable generic or

linking claim. Election was made **without** traverse in the reply filed on October 23,

2009. Claims 1-6, 10-15, 17-18, 20-21, 23-24, 26, 28-31, 33-35, 37-44, 46-52, and 58-

61 are currently pending. Applicant then proceeded to cancel claims 68-75.

## *Response to Arguments*

2.      Applicant's arguments with respect to claims 1-6, 10-15, 17-18, 20-21, 23-24, 26,

28-31, 33-35, 37-44, 46-52, and 58-61 have been considered but are moot in view of

the new ground(s) of rejection.

## *Claim Rejections - 35 USC § 103*

3.      The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

4.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

5.      Claims 1-2, are rejected under 35 U.S.C. 103(a) as being unpatentable over

Willard (US 20050192892 A1) in view of Narin (US 6966034 B2) in further view of

Epstein (US 20030004828 A1) in further view of Courts et al. (US 6480894).


6.      Regarding claim 1, Willard teaches a payment processing gateway server for

processing financial transactions (¶ 37). Willard teaches a network interface configured

to couple to a network and receive first financial transaction authorization requests, the

first financial transaction authorization requests received from merchants and include

transaction specific data, merchant and or store related data which is related to a

merchant generating the authorization request (¶ 37). Willard teaches a gateway

processor configured to process first financial transaction authorization requests

received through the network interface (¶ 37, 43). Willard teaches a financial network

interface configured to couple to at least one financial network and transmit second

financial transaction authorization requests to a financial institution coupled to the at

least one financial network based upon first financial transaction authorization requests,

the financial network interface further configured to receive first financial transaction

authorization results from the financial institution (¶ 37, 43, 49). Willard teaches the

network interface further configured to send second financial transaction authorization

results to merchants in response to the first financial transaction authorization results (¶

37, 43, 49-50). Willard teaches including a contract identification field which identifies a

contract with a payment provider (¶ 37, 43, 49-50). Willard teaches a supplemental

header including a contract identification field which identifies a contract with a payment

provider (¶ 37, 43, 58-59). Willard teaches a comparison of data in the contract

identification field to the listing of valid contract identifications, wherein the gateway

processor is further configured to reject the first financial transaction authorization

requests based on a determination that the data in the contract identification field does

not match a valid contract identification in the listing of valid contract identifications (¶

37, 43, 44). Willard teaches a gateway memory that includes a listing of valid contract

identification (¶ 37, 43, 49, 55, 114, 118). Willard does not specifically teach a

supplemental header. However, Narin teaches a supplemental header (col. 4, line 4 –

col. 6, line 60). Willard teaches loading money by transferring data in real-time through

existing technology over a network. Narin teaches servicing requests for data

transmitted across such a network, such as requests for web pages from a server

computing device, such as an Internet server. It would have been obvious to one of

ordinary skill in the art at the time of the invention to modify Willard to include a

supplemental header. A supplemental header at the time of the invention was a well

known part of a message format. A supplemental header can be used to store any kind

of information (including financial data) and the information that controls the process

would operate the same whether in the supplemental header or in the message body.

The information is not changed or modified based on being in the supplemental header.

A supplemental header is a convenient place to store the information to control a

process, as it is a place that is easier to access for a wider variety of software

packages. Willard teaches a network interface but does not specifically teach a public

network interface. However, Epstein teaches a public network interface (¶ 12-25).

Willard teaches loading money by transferring data in real-time through existing

technology over a network. Epstein teaches network communications and database

maintenance including a system to facilitate Internet commerce. Both Willard and

Epstein use network communications for the facilitation of Internet commerce. It would

have been obvious to one of ordinary skill in the art at the time of the invention to modify

Willard to include the details of a public network interface. The current invention uses a

public network as a mode for request of a transaction and then a financial network is

used to process the request. Willard uses an in person mode for the request of a

transaction and then uses a financial network to process the request. It would have

been obvious to one of ordinary skill in the art at the time of the invention to make use of

a public network to automate a previously manual activity. The use of technology is

efficient and saves time and money. Willard teaches a public interface, a gateway

processor, a financial network, and a public network. Willard does not specifically teach

maintaining a state. However, Courts teaches a state server accessible by the web

cluster configured to maintain state-related data (col. 1, line 50 – col. 10, line 32).

Willard discloses transaction processing and authorization between a customer and a

merchant using computer networks. Courts discloses a user based system with multiple

web transactions. It would have been obvious to one of ordinary skill in the art at the

time of the invention to modify Willard to include the details of maintaining a state.

Without a way to manage state, between web transactions the system will have

"forgotten" information about the user and the context of the session.  This can be

further complicated by the fact that in many large web systems the user does not

interact with the same web server from transaction to transaction. A database would

allow the collection managed and stored in one place and all accessible via the same

server.

7.      Regarding claim 2, Willard teaches wherein configured to reject comprises the

gateway processor configured to send a transaction response that includes a

transaction header field and a response data field, wherein the transaction header field

identifies a particular transaction, and wherein web servers and the shared serve

exchange data utilizing objects (¶ 37, 39, 43-44, 49-50).

8.      Claim 5-6, 10, 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Willard (US 20050192892 A1) in view of Narin (US 6966034 B2) in further view of

Epstein (US 20030004828 A1) in further view of Courts et al. (US 6480894) as applied

above, in further view of Official Notice (now admitted prior art).

9.      Regarding claim 5, Willard teaches contract identification (¶ 37-39). Willard does

not specifically teach wherein the field comprises two bytes of 8 data bits each. Official

Notice (now admitted prior art) is taken that a data format of two bytes of 8 data bits

each was well known at the time of the invention. 1 byte having 8 bits is ubiquitous. That

specific size is convenient to many architectures.

10.     Regarding claim 6, Willard teaches wherein the gateway memory includes log data related to data carried in the contract identification field of information holder received from a plurality of first financial transaction authorization requests (¶ 37-44). Willard does not specifically teach a supplemental header. However, Narin teaches a supplemental header (col. 4, line 4 – col. 6, line 60). Willard teaches loading money by transferring data in real-time through existing technology over a network. Narin teaches servicing requests for data transmitted across such a network, such as requests for web pages from a server computing device, such as an Internet server. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include a supplemental header. A supplemental header at the time of the invention was a well known part of a message format. A supplemental header can be used to store any kind of information and the information that controls the process would operate the same whether in the supplemental header or in the message body. The information is not changed or modified based on being in the supplemental header. A supplemental header is a convenient place to store the information to control a process, as it is a place that is easier to access for a wider variety of software packages.

11.     Regarding claim 10, Willard teaches wherein the gateway processor maintains an open socket connection with a financial institution throughout the financial network interface during processing of a financial transaction authorization request (¶ 49). Willard discloses an open Internet connection with a financial institution.

12.     Regarding claim 11, Willard teaches wherein the information holder includes a payment type field (¶ 43, 49-56). Willard does not specifically teach a supplemental header. However, Narin teaches a supplemental header (col. 4, line 4 – col. 6, line 60). Willard teaches loading money by transferring data in real-time through existing technology over a network. Narin teaches servicing requests for data transmitted across such a network, such as requests for web pages from a server computing device, such as an Internet server. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include a supplemental header. A supplemental header at the time of the invention was a well known part of a message format. A supplemental header can be used to store any kind of information and the information that controls the process would operate the same whether in the supplemental header or in the message body. The information is not changed or modified based on being in the supplemental header. A supplemental header is a convenient place to store the information to control a process, as it is a place that is easier to access for a wider variety of software packages.

13.     Claims 12-14, are rejected under 35 U.S.C. 103(a) as being unpatentable over Willard (US 20050192892 A1) in view Narin (US 6966034 B2), in further view of Epstein (US 20030004828 A1) in further view of Courts et al. (US 6480894) in further view of Official Notice (now admitted prior art) as applied above, in further view of Keresman et al. (US 7051002 B2).

14.    Regarding claim 12, Willard teaches a public interface, a gateway processor, a financial network, and a public network. Willard does not specifically teach a HTTPS standard. However, Keresman teaches wherein financial transaction authorization request is in accordance with an HTTPS standard (col. 6, line 57 – col. 7, line 7, col. 7, line 40 – col. 8, line 37). Willard discloses transaction processing and authorization between a customer and a merchant using computer networks. Keresman discloses a method for processing authentication of a consumer using different types of payment instruments to conduct a commercial transaction over a communications network with a merchant. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include the details of HTTPS. HTTPS is a variant of HTTP, which is used for handling secure transactions. In any type of computer related financial transaction security is very important. Using HTTPS would keep important data secure.

15.    Regarding claim 13, Willard teaches a public interface, a gateway processor, a financial network, and a public network. Willard does not specifically teach a XML standard. However, Keresman teaches wherein a financial transaction authorization request is in accordance with an XML standard (col. 6, line 57 – col. 7, line 7, col. 8, line 8 – col. 10, line 6). Willard discloses transaction processing and authorization between a customer and a merchant using computer networks. Keresman discloses a method for processing authentication of a consumer using different types of payment instruments to conduct a commercial transaction over a communications network with a merchant. It would have been obvious to one of ordinary skill in the art at the time of the invention to

modify Willard to include the details of XML. XML is a general-purpose markup language. It was designed to be human and machine readable, it supports Unicode, it contains strict syntax and parsing requirements which make necessary parsing algorithms simple, XML is heavily used as a format for document storage and processing, and it is based on international standards.

16.     Regarding claim 14, Willard teaches a public interface, a gateway processor, a financial network, and a public network. Willard does not specifically teach a secure socket layer. However, Keresman teaches wherein a financial transaction authorization request is in accordance with a secure socket layer (col. 6, line 57 – col. 7, line 7). Willard discloses transaction processing and authorization between a customer and a merchant using computer networks. Keresman discloses a method for processing authentication of a consumer using different types of payment instruments to conduct a commercial transaction over a communications network with a merchant. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include the details of a secure socket layer. Secure socket layer protocol is a standard for transmitting confidential data such as credit card numbers over the Internet. Most true business sites support this feature, which allows more security in data, transmitted over the WWW. This is the standard minimum safe security level for true business on the Internet.

17.    Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Willard (US 20050192892 A1) in view of Narin (US 6966034 B2), in further view of

Epstein (US 20030004828 A1) in further view of Courts et al. (US 6480894) as applied

above in further view of Talati et al. (US 5903878 A).


18.    Regarding claim 3, Willard teaches a public network interface and a gateway

processor for financial transactions. However, Willard does not specifically teach a

NACK message. However, Talati teaches wherein the gateway server sends a NACK

message to a merchant through the public network interface if the data in the contract

identification field does not match the valid contract identifications contained in memory

(col. 9, lines 10-67). Willard teaches loading money by transferring data in real-time

through existing technology over a network. Narin teaches servicing requests for data

transmitted across such a network, such as requests for web pages from a server

computing device, such as an Internet server. It would have been obvious to one of

ordinary skill in the art at the time of the invention to modify Willard to include the details

of a NACK message. Sending a NACK is for the receiving station to not acknowledge

that it has received packets. By not receiving an ACK, the sender could assume that the

receiver is overflowing or the network is congested and slow down its transmission.

TCP receivers use ACK to inform a sending host that packets have arrived. If the ACK

is not sent, the sender assumes packets have been lost. NACK is used to indicate that

a packet has been corrupted and to resend it.  A checksum error may indicate a

corrupted packet. A NACK is different than a normal acknowledgment in that it indicates

that a packet was received in a corrupted state rather than not received at all. When sending information over a network it is important to know whether or not the data was received. If the data is not received it is important to be alerted that it needs to be resent.

19.     Regarding claim 4, Willard teaches a public network interface and a gateway processor for financial transactions. However, Willard does not specifically teach an ACK message. However, Talati teaches wherein the gateway server sends an ACK message to a merchant through the public network interface if the data in the contract identification field matches a valid contract identification contained in memory (col. 9, lines 10-67). Willard teaches loading money by transferring data in real-time through existing technology over a network. Narin teaches servicing requests for data transmitted across such a network, such as requests for web pages from a server computing device, such as an Internet server. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include an ACK message. An ACK is a confirmation of receipt. When data is transmitted between two systems, the recipient can acknowledge that it received the data.  When sending information over a network it is important to know whether or not the data was received.

20.     Claim 15, is rejected under 35 U.S.C. 103(a) as being unpatentable over Willard (US 20050192892 A1) in view of Narin (US 6966034 B2), in further view of Epstein (US 20030004828 A1) in further view of Courts et al. (US 6480894) in further view of Official

Notice (now admitted prior art) as applied above, in further view of Talati et al. (US

5903878 A).

21.     Regarding claims 15, Willard teaches a public network interface and a gateway

processor for financial transactions. However, Willard does not specifically teach an

ACK message. However, Talati teaches wherein an ACK transmission through the

public network interface by the gateway server to a merchant does not precede a

transmission of an authorization result (col. 9, lines 10-67). Willard teaches loading

money by transferring data in real-time through existing technology over a network.

Narin teaches servicing requests for data transmitted across such a network, such as

requests for web pages from a server computing device, such as an Internet server. It

would have been obvious to one of ordinary skill in the art at the time of the invention to

modify Willard to include an ACK message. An ACK is a confirmation of receipt. When

data is transmitted between two systems, the recipient can acknowledge that it received

the data. When sending information over a network it is important to know whether or

not the data was received.

22.     Claim 17, 18, 20, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Willard (US 20050192892 A1) in view of Narin (US 6966034 B2) in further view of

Epstein (US 20030004828 A1) in further view of Guenthner et al. (US 6134588 A).

23.    Regarding claim 17, Willard teaches a payment processing gateway server for

processing financial transactions (¶ 37). Willard teaches a network interface configured

to couple to a network and receive first financial authorization requests, financial

transaction the first authorization requests received from merchants and include

transaction specific data, merchant and/or related data which is related to a merchant

generating the authorization request (¶ 37). Willard teaches a gateway processor

configured to process first financial transaction authorization requests received through

the network interface (¶ 37, 43). Willard teaches a gateway memory that includes a

cache of merchant or store/location invariant data (¶ 37, 43, 59). Willard teaches a

gateway processor configured to retrieve the merchant or store/location invariant data

based upon the cache-key field and configured to process first financial transaction

authorization requests received through the public network interface based upon

supplemental header (¶ 37, 43, 59). Willard teaches a financial network interface

configured to couple to at least one financial network and transmit second financial

transaction authorization requests to a financial institution coupled to the at least one

financial network based upon first financial transaction authorization requests, the

financial network interface further configured to receive first financial transaction

authorization results from the financial institution (¶ 37, 43, 49). Willard teaches the

network interface further configured to send second financial transaction authorization

results to merchants in response to the first financial transaction authorization results (¶

37, 43, 49-50). Willard teaches a payment type identification field which identifies a

financial network coupled to the financial network interface for processing the first

financial transaction authorization request (¶ 37, 43, 49-50). Willard does not specifically

teach a supplemental header. However, Narin teaches a supplemental header (col. 4,

line 4 – col. 6, line 60). Willard teaches loading money by transferring data in real-time

through existing technology over a network. Narin teaches servicing requests for data

transmitted across such a network, such as requests for web pages from a server

computing device, such as an Internet server. It would have been obvious to one of

ordinary skill in the art at the time of the invention to modify Willard to include a

supplemental header. A supplemental header at the time of the invention was a well

known part of a message format. A supplemental header can be used to store any kind

of information (including financial data) and the information that controls the process

would operate the same whether in the supplemental header or in the message body.

The information is not changed or modified based on being in the supplemental header.

A supplemental header is a convenient place to store the information to control a

process, as it is a place that is easier to access for a wider variety of software

packages. Willard teaches a network interface but does not specifically teach a public

network interface. However, Epstein teaches a public network interface (¶ 12-25).

Willard teaches loading money by transferring data in real-time through existing

technology over a network. Epstein teaches network communications and database

maintenance including a system to facilitate Internet commerce. Both Willard and

Epstein use network communications for the facilitation of Internet commerce. It would

have been obvious to one of ordinary skill in the art at the time of the invention to modify

Willard to include the details of a public network interface. The current invention uses a

public network as a mode for request of a transaction and then a financial network is

used to process the request. Willard uses an in person mode for the request of a

transaction and then uses a financial network to process the request. It would have

been obvious to one of ordinary skill in the art at the time of the invention to make use of

a public network to automate a previously manual activity. The use of technology is

efficient and saves time and money. Willard teaches a network interface but does not

specifically teach directing multiple web requests from an IP address to the same web

server. However, Guenthner teaches a web server front end that directs multiple web

requests from one particular Internet Protocol address to the same web server (see at

least abstract). Willard teaches loading money by transferring data in real-time through

existing technology over a network. Guenthner teaches a method for ensuring that a

Web browser obtains high availability to Web services. Both Willard and Guenthner use

network communications for the facilitation of web services. It would have been obvious

to one of ordinary skill in the art at the time of the invention to modify Willard to include

the details of a web server directional service. The ability to forward requests from an IP

address to a web server allows the Internet page provider the ability to minimize the

amount of traffic that is seen by one server. Since servers can only hold a specific

amount of traffic it protects from possible abuse of services by minimizing the number of

users on the server and the amount of time connected.


24.      Regarding claim 18, Willard teaches wherein the payment type identification field

identifies a transaction type, payment network and/or protocol (¶ 37-43). Willard

teaches a network interface but does not specifically teach directing multiple web requests from an IP address to the same web server. However, Guenthner teaches a web server front end that directs multiple web requests from one particular Internet Protocol address to the same web server for a set period of time (see at least abstract). Willard teaches loading money by transferring data in real-time through existing technology over a network. Guenthner teaches a method for ensuring that a Web browser obtains high availability to Web services. Both Willard and Guenthner use network communications for the facilitation of web services. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include the details of a web server directional service. The ability to forward requests from an IP address to a web server allows the Internet page provider the ability to minimize the amount of traffic that is seen by one server. Since servers can only hold a specific amount of traffic it protects from possible abuse of services by minimizing the number of users on the server and the amount of time connected.

25.     Regarding claim 20, Willard teaches wherein the payment type identification field describes a protocol format of the transaction specific data (¶ 38). Willard teaches wherein the gateway processor maintains an open socket connection with a financial institution through the financial network interface during processing of a financial transaction authorization request (¶ 49). Willard discloses an open Internet connection with a financial institution.

26.     Regarding claim 21, Willard teaches wherein the information holder further

includes a contract identification field which identifies a contract with a payment provider

(¶ 37-39). Willard does not specifically teach a supplemental header. However, Narin

teaches a supplemental header (col. 4, line 4 – col. 6, line 60). Willard teaches loading

money by transferring data in real-time through existing technology over a network.

Narin teaches servicing requests for data transmitted across such a network, such as

requests for web pages from a server computing device, such as an Internet server. It

would have been obvious to one of ordinary skill in the art at the time of the invention to

modify Willard to include a supplemental header. A supplemental header at the time of

the invention was a well known part of a message format. A supplemental header can

be used to store any kind of information and the information that controls the process

would operate the same whether in the supplemental header or in the message body.

The information is not changed or modified based on being in the supplemental header.

A supplemental header is a convenient place to store the information to control a

process, as it is a place that is easier to access for a wider variety of software

packages.


27.     Claim 23, is rejected under 35 U.S.C. 103(a) as being unpatentable over Willard

(US 20050192892 A1) in view of Narin (US 6966034 B2) in further view of Epstein (US

20030004828 A1) in further view of Guenthner et al. (US 6134588 A) as applied above,

in further view of Official Notice (now admitted prior art).

28.     Regarding claim 23, Willard teaches wherein financial transaction authorization

requests include a data field and wherein the gateway processor populates the storage

area contained in the memory with data received in the data field (¶ 37-41).  Official

Notice (now admitted prior art) is taken that the use of cache memory is old and well

known as it provides the benefit of more efficiently utilizing storage.  Cache is temporary

storage that conveniently stores data that is only needed temporarily.  If you stored

everything in permanent storage, you'd quickly, needlessly, and inefficiently use up

valuable permanent system storage on information that is only temporarily used which

would be a waste of system resources.


29.     Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Willard

(US 20050192892 A1) in view of Narin (US 6966034 B2) in further view of Epstein (US

20030004828 A1) in view of Official Notice (now admitted prior art) in further view of

Steele et al. (US 7016875 B1) in further view of Guenthner et al. (US 6134588 A).


30.     Regarding claim 33, Willard teaches a payment processing gateway server for

processing financial transactions (¶ 37). Willard teaches a network interface configured

to couple to a public network and receive first financial authorization requests, financial

transaction the first authorization requests received from merchants and which include

transaction specific data, memory-able data and a memory key (¶ 37). Willard teaches a

gateway processor configured to process first financial transaction authorization

requests received through the network interface (¶ 37, 43). Willard teaches wherein the

memory comprises data indicative of a merchant and data indicative of a store (¶ 37,

43-44, 58-59). Willard teaches a gateway processor configured to retrieve the data from

the gateway memory based upon the memory (¶ 37, 43-44, 58-59). Willard teaches a

financial network interface configured to couple to at least one financial network and

transmit second financial transaction authorization requests to a financial institution

coupled to the at least one financial network based upon first financial transaction

authorization requests, the financial network interface further configured to receive first

financial transaction authorization results from the financial institution (¶ 37, 43, 49).

Willard teaches and the network interface further configured to send second financial

transaction authorization results to merchants in response to the first financial

transaction authorization results (¶ 37, 43, 49-50). Willard teaches a memory configured

to memory the memory-able data from the first financial authorization request and index

the memory in accordance with the memory key (¶ 49). Official Notice (now admitted

prior art) is taken that the use of cache memory is old and well known as it provides the

benefit of more efficiently utilizing storage.  Cache is temporary storage that

conveniently stores data that is only needed temporarily.  If you stored everything in

permanent storage, you'd quickly, needlessly, and inefficiently use up valuable

permanent system storage on information that is only temporarily used which would be

a waste of system resources. Willard does not specifically teach a supplemental header.

However, Narin teaches a supplemental header (col. 4, line 4 – col. 6, line 60). Narin

teaches volatile memory (col. 4, lines 34-54). Willard teaches loading money by

transferring data in real-time through existing technology over a network. Narin teaches

servicing requests for data transmitted across such a network, such as requests for web

pages from a server computing device, such as an Internet server. It would have been

obvious to one of ordinary skill in the art at the time of the invention to modify Willard to

include a supplemental header. A supplemental header at the time of the invention was

a well known part of a message format. A supplemental header can be used to store

any kind of information and the information that controls the process would operate the

same whether in the supplemental header or in the message body. The information is

not changed or modified based on being in the supplemental header. A supplemental

header is a convenient place to store the information to control a process, as it is a

place that is easier to access for a wider variety of software packages. Willard teaches a

network interface but does not specifically teach a public network interface. However,

Epstein teaches a public network interface (¶ 12-25). Willard teaches loading money by

transferring data in real-time through existing technology over a network. Epstein

teaches network communications and database maintenance including a system to

facilitate Internet commerce. Both Willard and Epstein use network communications for

the facilitation of Internet commerce. It would have been obvious to one of ordinary skill

in the art at the time of the invention to modify Willard to include the details of a public

network interface. The current invention uses a public network as a mode for request of

a transaction and then a financial network is used to process the request. Willard uses

an in person mode for the request of a transaction and then uses a financial network to

process the request. It would have been obvious to one of ordinary skill in the art at the

time of the invention to make use of a public network to automate a previously manual

activity. The use of technology is efficient and saves time and money. Willard teaches a network interface but does not specifically teach directing multiple web requests from an IP address to the same web server. However, Guenthner teaches restoring cache-able data upon failure by utilizing a database (see at least col. 7, lines 44-67). Willard teaches loading money by transferring data in real-time through existing technology over a network. Guenthner teaches a method for ensuring that a Web browser obtains high availability to Web services. Both Willard and Guenthner use network communications for the facilitation of web services. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include the details of restoring data. Restoring cache-able data upon failure is important to a user as all technology has a possibility of failure. Restoration properties allow the preservation of data.

31.    Claims 34-35, 37-38, 46-48, are rejected under 35 U.S.C. 103(a) as being unpatentable over Willard (US 20050192892 A1) in view of Narin (US 6966034 B2) in further view of Epstein (US 20030004828 A1) in further view of Official Notice (now admitted prior art) in further view of Steele et al. (US 7016875 B1) in further view of Guenthner et al. (US 6134588 A).

32.    Regarding claim 34, Willard teaches wherein the memory key comprises 128 bits of data (¶ 37, 51).  Official Notice (now admitted prior art) is taken that the use of cache memory is old and well known as it provides the benefit of more efficiently utilizing

storage. Cache is temporary storage that conveniently stores data that is only needed temporarily. If you stored everything in permanent storage, you'd quickly, needlessly, and inefficiently use up valuable permanent system storage on information that is only temporarily used which would be a waste of system resources.

33.   Regarding claim 35, Willard teaches a memory (¶ 39). Official Notice (now admitted prior art) is taken that the use of cache memory is old and well known as it provides the benefit of more efficiently utilizing storage. Cache is temporary storage that conveniently stores data that is only needed temporarily. If you stored everything in permanent storage, you'd quickly, needlessly, and inefficiently use up valuable permanent system storage on information that is only temporarily used which would be a waste of system resources. A cache system is old and well known in any transaction system. The cache is a copy of something that has been recently used that is kept based on the chance that it would be faster to use it again in the cache then to retrieve it again over a network. Willard does not specifically teach a GUID. However, Steele teaches a GUID (col. 10, lines 7-56). Willard teaches loading money by transferring data in real-time through existing technology over a network. Steele teaches the storage, management, and delivery of user or consumer data on or over a network. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include a GUID. A GUID is a 128-bit integer (16 bytes) that can be used across all computers and networks wherever a unique identifier is required. Such an identifier has a very low probability of being duplicated. The term GUID is used

specifically by the Microsoft Corporation for a number that its programming generates to create a unique identity for an entity such as a Word document. GUIDs are widely used in Microsoft products to identify interfaces, replica sets, records, and other objects. It helps to differentiate between different cache keys. Identifiers allow you to find the correct key quickly as oppose to trial and error. Most systems will only allow a few tries at the key before the system will shut down to protect against a brute force attack.

34.     Regarding claim 37, Willard teaches wherein the memory storage-able data (¶ 39). Official Notice (now admitted prior art) is taken that the use of cache memory is old and well known as it provides the benefit of more efficiently utilizing storage.  Cache is temporary storage that conveniently stores data that is only needed temporarily.  If you stored everything in permanent storage, you'd quickly, needlessly, and inefficiently use up valuable permanent system storage on information that is only temporarily used which would be a waste of system resources.  Willard does not specifically teach where the memory includes data selected from the group of data consisting of merchant name, country, state, location, zip code, merchant category and time zone. However, in paragraph 37 the applicant states:

> The authorization request 200 may also contain cache-able data 206.  Typical prior art financial transaction protocols are capable of carrying a fairly rich set of merchant data, including for example, merchant name (25 bytes), country (3 bytes), state (2 bytes), location (13 bytes), city code/zip code (3 bytes), merchant category (4 bytes), acquirer bin (6 bytes), time zone differential (3 bytes), merchant category code (4 bytes), extra field separators for ease of viewing (4 bytes) and others.

Thus the applicant admits this is prior art and not unique to their invention.

35.    Regarding claim 38, Willard teaches wherein the gateway processor provides a web service on the public network interface (¶ 37-45).

36.    Regarding claim 46, Willard teaches wherein the gateway processor transmits a request message to merchants through the public network interface which requests a transmission of memory-able data for populating the memory (¶ 43-50). Official Notice (now admitted prior art) that the use of cache memory is old and well known as it provides the benefit of more efficiently utilizing storage.  Cache is temporary storage that conveniently stores data that is only needed temporarily.  If you stored everything in permanent storage, you'd quickly, needlessly, and inefficiently use up valuable permanent system storage on information that is only temporarily used which would be a waste of system resources.

37.    Regarding claim 47, Willard teaches wherein the financial transaction authorization request includes an information holder containing a contract identification field (¶ 37, 43, 49-50). Willard does not specifically teach a supplemental header. However, Narin teaches a supplemental header (col. 4, line 4 – col. 6, line 60). Narin teaches volatile memory (col. 4, lines 34-54). Willard teaches loading money by transferring data in real-time through existing technology over a network. Narin teaches servicing requests for data transmitted across such a network, such as requests for web pages from a server computing device, such as an Internet server. It would have been

obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include a supplemental header. A supplemental header at the time of the invention was a well known part of a message format. A supplemental header can be used to store any kind of information and the information that controls the process would operate the same whether in the supplemental header or in the message body. The information is not changed or modified based on being in the supplemental header. A supplemental header is a convenient place to store the information to control a process, as it is a place that is easier to access for a wider variety of software packages.

38.    Regarding claim 48, Willard teaches wherein the financial transaction authorization request includes an information holder containing a payment type identification field (¶ 37, 43, 49-50, 57). Willard does not specifically teach a supplemental header. However, Narin teaches a supplemental header (col. 4, line 4 – col. 6, line 60). Willard teaches loading money by transferring data in real-time through existing technology over a network. Narin teaches servicing requests for data transmitted across such a network, such as requests for web pages from a server computing device, such as an Internet server. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include a supplemental header. A supplemental header at the time of the invention was a well known part of a message format. A supplemental header can be used to store any kind of information and the information that controls the process would operate the same whether in the supplemental header or in the message body. The information is not

changed or modified based on being in the supplemental header. A supplemental

header is a convenient place to store the information to control a process, as it is a

place that is easier to access for a wider variety of software packages.

39.     Claim  24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Willard

(US 20050192892 A1) in view of Narin (US 6966034 B2) in further view of Epstein (US

20030004828 A1) in further view of Guenthner et al. (US 6134588 A) in further view of

Official Notice (now admitted prior art) as applied above, in further view of Langhans

(US 5621201 A).

40.     Regarding claim 24, Willard teaches wherein memory-key comprises a 128 bit

data field (¶ 43, 51). Willard discloses merchant identifiers. Official Notice (now admitted

prior art) that the use of cache memory is old and well known as it provides the benefit

of more efficiently utilizing storage.  Cache is temporary storage that conveniently stores

data that is only needed temporarily.  If you stored everything in permanent storage,

you'd quickly, needlessly, and inefficiently use up valuable permanent system storage

on information that is only temporarily used which would be a waste of system

resources.

41.     Claims 26, and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Willard (US 20050192892 A1) in view Narin (US 6966034 B2),  in further view of

Epstein (US 20030004828 A1) in further view of Guenthner et al. (US 6134588 A) in

further view of Official Notice (now admitted prior art) in further view of Langhans (US

5621201 A) as applied above, in further view of Keresman et al. (US 7051002 B2).


42.     Regarding claim 26, Willard teaches a public interface, a gateway processor, a

financial network, and a public network. Willard does not specifically teach a secure

socket layer. However, Keresman teaches wherein socket comprises an SSL

connection (col. 6, line 57 – col. 7, line 7). Willard discloses transaction processing and

authorization between a customer and a merchant using computer networks. Keresman

discloses a method for processing authentication of a consumer using different types of

payment instruments to conduct a commercial transaction over a communications

network with a merchant. It would have been obvious to one of ordinary skill in the art at

the time of the invention to modify Willard to include the details of a secure socket layer.

Secure socket layer protocol is a standard for transmitting confidential data such as

credit card numbers over the Internet. Most true business sites support this feature,

which allows more security in data, transmitted over the WWW. This is the standard

minimum safe security level for true business on the Internet.

43.     Regarding claim 28, Willard teaches a public interface, a gateway processor, a

financial network, and a public network. Willard teaches a front end as software. Willard

does not specifically teach a HTTPS standard. However, Keresman wherein the first

financial transaction authorization requests are in accordance with an HTTPS standard

teaches wherein financial transaction authorization request is in accordance with an

HTTPS standard (col. 6, line 57 – col. 7, line 7, col. 7, line 40 – col. 8, line 37). Willard

discloses transaction processing and authorization between a customer and a merchant

using computer networks. Keresman discloses a method for processing authentication

of a consumer using different types of payment instruments to conduct a commercial

transaction over a communications network with a merchant. It would have been

obvious to one of ordinary skill in the art at the time of the invention to modify Willard to

include the details of HTTPS. HTTPS is a variant of HTTP, which is used for handling

secure transactions. In any type of computer related financial transaction security is

very important. Using HTTPS would keep important data secure.


44.     Regarding claim 29, Willard teaches a public interface, a gateway processor, a

financial network, and a public network. Willard teach a front end as hardware. Willard

does not specifically teach a XML standard. However, Keresman teaches wherein a

financial transaction authorization request is in accordance with an XML standard (col.

6, line 57 – col. 7, line 7, col. 8, line 8 – col. 10, line 6). Willard discloses transaction

processing and authorization between a customer and a merchant using computer

networks. Keresman discloses a method for processing authentication of a consumer

using different types of payment instruments to conduct a commercial transaction over a

communications network with a merchant. It would have been obvious to one of

ordinary skill in the art at the time of the invention to modify Willard to include the details

of XML. XML is a general-purpose markup language. It was designed to be human and

machine readable, it supports Unicode, it contains strict syntax and parsing

requirements which make necessary parsing algorithms simple, XML is heavily used as

a format for document storage and processing, and it is based on international

standards.


45.     Regarding claim 30, Willard teaches a public interface, a gateway processor, a

financial network, and a public network. Willard does not specifically teach a secure

socket layer. However, Keresman teaches wherein a financial transaction authorization

request is in accordance with a secure socket layer (col. 6, line 57 – col. 7, line 7).

Willard discloses transaction processing and authorization between a customer and a

merchant using computer networks. Keresman discloses a method for processing

authentication of a consumer using different types of payment instruments to conduct a

commercial transaction over a communications network with a merchant. It would have

been obvious to one of ordinary skill in the art at the time of the invention to modify

Willard to include the details of a secure socket layer. Secure socket layer protocol is a

standard for transmitting confidential data such as credit card numbers over the

Internet. Most true business sites support this feature, which allows more security in

data, transmitted over the WWW. This is the standard minimum safe security level for

true business on the Internet.


46.     Claims 49-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Willard (US 20050192892 A1) in view Narin (US 6966034 B2) in further view of Epstein

(US 20030004828 A1)  in view of Official Notice (now admitted prior art) in further view

of Steele et al. (US 7016875 B1) in further view of Guenthner et al. (US 6134588 A) as

applied above in further view of Keresman et al. (US 7051002 B2).


47.     Regarding claim 49, Willard teaches a public interface, a gateway processor, a

financial network, and a public network. Willard does not specifically teach a HTTPS

standard. However, Keresman wherein the first financial transaction authorization

requests are in accordance with an HTTPS standard teaches wherein financial

transaction authorization request is in accordance with an HTTPS standard (col. 6, line

57 – col. 7, line 7, col. 7, line 40 – col. 8, line 37). Willard discloses transaction

processing and authorization between a customer and a merchant using computer

networks. Keresman discloses a method for processing authentication of a consumer

using different types of payment instruments to conduct a commercial transaction over a

communications network with a merchant. It would have been obvious to one of

ordinary skill in the art at the time of the invention to modify Willard to include the details

of HTTPS. HTTPS is a variant of HTTP, which is used for handling secure transactions.

In any type of computer related financial transaction security is very important. Using

HTTPS would keep important data secure.


48.     Regarding claim 50, Willard teaches a public interface, a gateway processor, a

financial network, and a public network. Willard does not specifically teach a XML

standard. However, Keresman teaches wherein a financial transaction authorization

request is in accordance with an XML standard (col. 6, line 57 – col. 7, line 7, col. 8, line

8 – col. 10, line 6). Willard discloses transaction processing and authorization between a customer and a merchant using computer networks. Keresman discloses a method for processing authentication of a consumer using different types of payment instruments to conduct a commercial transaction over a communications network with a merchant. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include the details of XML. XML is a general-purpose markup language. It was designed to be human and machine readable, it supports Unicode, it contains strict syntax and parsing requirements which make necessary parsing algorithms simple, XML is heavily used as a format for document storage and processing, and it is based on international standards.

49.     Regarding claim 51, Willard teaches a public interface, a gateway processor, a financial network, and a public network. Willard does not specifically teach a secure socket layer. However, Keresman teaches wherein a financial transaction authorization request is in accordance with a secure socket layer (col. 6, line 57 – col. 7, line 7). Willard discloses transaction processing and authorization between a customer and a merchant using computer networks. Keresman discloses a method for processing authentication of a consumer using different types of payment instruments to conduct a commercial transaction over a communications network with a merchant. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include the details of a secure socket layer. Secure socket layer protocol is a standard for transmitting confidential data such as credit card numbers over the

Internet. Most true business sites support this feature, which allows more security in

data, transmitted over the WWW. This is the standard minimum safe security level for

true business on the Internet.


50.      Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Willard

(US 20050192892 A1) in view of Narin (US 6966034 B2) in further view of Epstein (US

20030004828 A1) in further view of Official Notice (now admitted prior art) in further

view of Steele et al. (US 7016875 B1) in further view of Guenthner et al. (US 6134588

A) as applied above in further view of Jacobs et al. (US 6334114 B1).


51.      Regarding claim 40, Willard teaches a public interface, a gateway processor, a

financial network, and a public network. Willard does not specifically teach a runtime

environment. However, Jacobs teaches wherein the gateway processor operates in

accordance with a common language run time environment (col. 7, line 63 – col. 10, line

3). Willard discloses transaction processing and authorization between a customer and

a merchant using computer networks. Jacob discloses processing transactions in

networked computer systems. It would have been obvious to one of ordinary skill in the

art at the time of the invention to modify Willard to include the details of a runtime

environment. A runtime environment is important because it is a collection of

subroutines and environment variables that provide commonly used functions and data

for a program while it is running. A runtime environment is used to abstract the

hardware details out of the code implementation, so that the code can be written once

and run on any kind of CPU or operating system, as long as that machine has a runtime environment.

52.     Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over Willard (US 20050192892 A1) in view Narin (US 6966034 B2) in further view of Epstein (US 20030004828 A1) in view of Official Notice (now admitted prior art) and in further view of Keresman et al. (US 7051002 B2) in further view of Steele et al. (US 7016875 B1) in further view of Guenthner et al. (US 6134588 A) as applied above in further view of Jacobs et al. (US 6334114 B1).

53.     Regarding claim 52, Willard teaches a public interface, a gateway processor, a financial network, and a public network. Willard does not specifically teach a stateless logic. However, Jacobs teaches wherein the gateway processor processes financial transaction authorization requests using a stateless logic implementation and the gateway processor further synchronizes socket sessions with financial institutions through the financial network interface (col. 18, line 45 – col. 32, line 14). Willard discloses transaction processing and authorization between a customer and a merchant using computer networks. Jacob discloses processing transactions in networked computer systems. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include the details of a stateless logic. Stateless treats each request as an independent transaction, unrelated to any previous request. This simplifies the server design because it does not need to allocate storage

to deal with conversations in progress or worry about freeing it if a client dies in mid-transaction.

54.    Claims 39, 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willard (US 20050192892 A1), in view Narin (US 6966034 B2), in view of Official Notice (now admitted prior art), in further view of Epstein (US 20030004828 A1) in further view of Steele et al. (US 7016875 B1) in further view of Guenthner et al. (US 6134588 A) in further view of Courts et al. (US 6480894).

55.    Regarding claim 39, Willard teaches a public interface, a gateway processor, a financial network, and a public network. Willard does not specifically teach maintaining a state. However, Courts teaches wherein the web service maintains state for first financial transaction authorization requests (col. 1, line 50 – col. 10, line 32). Willard teaches a web service provider. Willard doesn't specifically teach ASP.NET however ASP.Net is a specific service provided by the applicant. Thus, Willard teaches a web service provider (see at least abstract). Willard discloses transaction processing and authorization between a customer and a merchant using computer networks. Courts discloses a user based system with multiple web transactions. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include the details of maintaining a state. Without a way to manage state, between web transactions the system will have "forgotten" information about the user and the context of the session.  This can be further complicated by the fact that in many large web

systems the user does not interact with the same web server from transaction to

transaction.

56.     Regarding claim 42, Willard teaches a public interface, a gateway processor, a

financial network, and a public network. Willard discloses databases (¶ 37-50). Willard

does not specifically teach maintaining a state. However, Courts teaches including

database configured to maintain the state (col. 1, line 50 – col. 10, line 32). Willard

discloses transaction processing and authorization between a customer and a merchant

using computer networks. Courts discloses a user based system with multiple web

transactions. It would have been obvious to one of ordinary skill in the art at the time of

the invention to modify Willard to include the details of maintaining a state. Without a

way to manage state, between web transactions the system will have "forgotten"

information about the user and the context of the session.  This can be further

complicated by the fact that in many large web systems the user does not interact with

the same web server from transaction to transaction. A database would allow the

collection managed and stored in one place and all accessible via the same server.

57.     Regarding claim 43, Willard teaches a public interface, a gateway processor, a

financial network, and a public network. Willard does not specifically teach web clusters.

However, Courts teaches a plurality of gateway processors configured to form a web

cluster (col. 1, line 50 – col. 10, line 32). Willard discloses transaction processing and

authorization between a customer and a merchant using computer networks. Courts

discloses a user based system with multiple web transactions. It would have been

obvious to one of ordinary skill in the art at the time of the invention to modify Willard to

include the details of a web cluster. With multiple servers providing the same service

there is resilience to failure and a load balancing between the servers.

58.     Regarding claim 44, Willard teaches a director configured to direct first financial

transaction authorization requests from a specific merchant to a specific gateway

processor (¶ 37, 65, 68).

59.     Claims 59 is rejected under 35 U.S.C. 103(a) as being unpatentable over Willard

(US 20050192892 A1), in view Narin (US 6966034 B2), in further view of Stewart et al

(US 20020120846 A1) in further view of Epstein (US 20030004828 A1) in further view

of Official Notice.

60.     Regarding claim 59, Willard teaches a public interface, a gateway processor, a

financial network, and a public network. Willard does not specifically teach duplicate

transactions. However, Stewart teaches wherein the gateway processor is configured to

recognize a duplicate financial transaction authorization request from the merchant

within a time limit (¶ 65-79). Willard discloses transaction processing and authorization

between a customer and a merchant using computer networks. Stewart discloses an

electronic payment and authentication system that includes features to verify the

authenticity of a payer, validate debit data, and facilitate debit payment transactions. It

would have been obvious to one of ordinary skill in the art at the time of the invention to

modify Willard to include the details of recognizing duplicate financial transactions.

Duplicate financial transactions charge the customer multiple times for an item

purchased. Depending on the amount charged the effects of charging multiple times

could cause problems to the customer. Having a system to recognize this saves time

and helps maintain good customer relations. Official Notice is taken that it was well

known in the art at the time of the invention for a gateway processor to transmit a

message to a merchant in response to a duplicate message. Sending warning

messages to merchants was well known in the art at the time of the invention.

Duplication of a transaction allows the customer and the merchant the ability of avoiding

the headaches involved with being charged multiple times for the same transaction.

61.     Claim 60 is rejected under 35 U.S.C. 103(a) as being unpatentable over Willard

(US 20050192892 A1), in view Narin (US 6966034 B2), in further view of Stewart et al

(US 20020120846 A1) in further view of Epstein (US 20030004828 A1) in further view

of Official Notice in further view of Steele et al. (US 7016875 B1).

62.     Regarding claim 60, Willard teaches a public interface, a gateway processor, a

financial network, and a public network. Willard does not specifically teach duplicate

transactions. However, Stewart teaches wherein the gateway processor transmits a

message to the merchant in response to the duplicate message (¶ 65-79). Willard

discloses transaction processing and authorization between a customer and a merchant

using computer networks. Stewart discloses an electronic payment and authentication

system that includes features to verify the authenticity of a payer, validate debit data,

and facilitate debit payment transactions. It would have been obvious to one of ordinary

skill in the art at the time of the invention to modify Willard to include the details of

recognizing duplicate financial transactions and sending a message. Duplicate financial

transactions charge the customer multiple times for an item purchased. Depending on

the amount charged the effects of charging multiple times could cause problems to the

customer. Having a system to recognize this saves time and helps maintain good

customer relations. When the message is sent it will inform the employee of the error

and allows for the accurate settlement of the till at the end of the day. Willard doesn't

teach a GUI. However, Steele teaches wherein the socket session with a merchant is

on a front end server, and wherein the socket session with the financial institution is

uniquely identified by a Global Unique Identifier (col. 10, lines 19-31). It would have

been obvious to one of ordinary skill in the art at the time of the invention to modify

Willard to teach a Global Unique Identifier. Knowing where to look in the registry and

having the correct GUID yields a lot information about a COM object (i.e., information in

the type library, its physical location, etc.). Windows also identifies user accounts by a

username (computer/domain and username) and assigns it a GUID. Some database

administrators even will use GUIDs as primary key values in databases.


63.      Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Willard

(US 20050192892 A1) in view of Narin (US 6966034 B2) in further view of Epstein (US

20030004828 A1) in further view of Official Notice (now admitted prior art) in further

view of Symonds et al. (US 6302326 B1) in further view of Steele et al. (US 7016875

B1) in further view of Guenthner et al. (US 6134588 A) in further view of Courts et al.

(US 6480894).


64.     Regarding claim 41, Willard teaches a public network interface, a gateway

processor, a financial network, and a memory. Official Notice (now admitted prior art) is

taken that storing duplicate data is old and well known. It is also old and well known that

this data would be referred to as a backup. Official Notice (now admitted prior art) that

the use of cache memory is old and well known as it provides the benefit of more

efficiently utilizing storage.  Cache is temporary storage that conveniently stores data

that is only needed temporarily.  If you stored everything in permanent storage, you'd

quickly, needlessly, and inefficiently use up valuable permanent system storage on

information that is only temporarily used which would be a waste of system resources.

Willard does not specifically teach SQL. However, Symonds teaches SQL. It would

have been obvious to one of ordinary skill in the art at the time of the invention to modify

Willard to include SQL. SQL was a well known programming language by those of

ordinary skill in the art. SQL was developed by in the 1970s and is often embedded in

general purpose programming languages.


65.     Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Willard

(US 20050192892 A1) in view of Narin (US 6966034 B2), in further view of Talati et al.

(US 5903878 A) in further view of Epstein (US 20030004828 A1) in further view of

Guenthner et al. (US 6134588 A) in further view of Official Notice (now admitted prior

art) in further view of Langhans (US 5621201 A).


66.     Regarding claim 31, Willard teaches a public network interface and a gateway

processor for financial transactions. However, Willard does not specifically teach an

ACK message. However, Talati teaches wherein an ACK transmission through the

public network interface by the gateway server to a merchant does not precede a

transmission of an authorization result (col. 9, lines 10-67). Willard teaches loading

money by transferring data in real-time through existing technology over a network.

Narin teaches servicing requests for data transmitted across such a network, such as

requests for web pages from a server computing device, such as an Internet server. It

would have been obvious to one of ordinary skill in the art at the time of the invention to

modify Willard to include an ACK message. An ACK is a confirmation of receipt. When

data is transmitted between two systems, the recipient can acknowledge that it received

the data.  When sending information over a network it is important to know whether or

not the data was received.


67.     Claims 58 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Willard (US 20050192892 A1), in view Narin (US 6966034 B2), in further view of

Epstein (US 20030004828 A1).

68.     Regarding claim 58, Willard teaches a payment processing gateway server for

processing debit type financial transactions (¶ 37). Willard teaches a network interface

configured to couple to a network and receive first financial transaction authorization

requests, the first financial transaction authorization requests received from merchants

and include transaction specific data, and merchant and/or store related data which is

related to a merchant generating the authorization request (¶ 37-56). Willard teaches a

gateway processor configured to process first financial transaction authorization

requests received through the network interface (¶ 38-39, 55-56). Willard teaches a

financial network interface configured to couple to at least one financial network and

transmit second financial transaction authorization requests to a financial institution

coupled to the at least one financial network based upon first financial transaction

authorization requests, the financial network interface further configured to receive first

financial transaction authorization results from the financial institution (¶ 38-39, 51, 55-

56). Willard teaches a network interface further configured to send second financial

transaction authorization results to merchants in response financial transaction results

(¶ 43-50). Willard teaches wherein the gateway processor maintains an open socket

connection with a financial institution through the financial network interface during

processing of a financial transaction authorization request (¶ 49). Willard discloses an

open Internet connection with a financial institution. Willard teaches the first

authorization financial network interface further configured to send an acknowledgement

to the financial institution independently of receipt of an acknowledgement from the

merchant in response to the second financial authorization results (¶ 43-50). Willard

does not specifically teach a supplemental header. However, Narin teaches a

supplemental header (col. 4, line 4 – col. 6, line 60). Willard teaches loading money by

transferring data in real-time through existing technology over a network. Narin teaches

servicing requests for data transmitted across such a network, such as requests for web

pages from a server computing device, such as an Internet server. It would have been

obvious to one of ordinary skill in the art at the time of the invention to modify Willard to

include a supplemental header. A supplemental header at the time of the invention was

a well known part of a message format. A supplemental header can be used to store

any kind of information and the information that controls the process would operate the

same whether in the supplemental header or in the message body. The information is

not changed or modified based on being in the supplemental header. A supplemental

header is a convenient place to store the information to control a process, as it is a

place that is easier to access for a wider variety of software packages. Willard teaches a

network interface but does not specifically teach a public network interface. However,

Epstein teaches a public network interface (¶ 12-25). Willard teaches loading money by

transferring data in real-time through existing technology over a network. Epstein

teaches network communications and database maintenance including a system to

facilitate Internet commerce. Both Willard and Epstein use network communications for

the facilitation of Internet commerce. It would have been obvious to one of ordinary skill

in the art at the time of the invention to modify Willard to include the details of a public

network interface. The current invention uses a public network as a mode for request of

a transaction and then a financial network is used to process the request. Willard uses

an in person mode for the request of a transaction and then uses a financial network to

process the request. It would have been obvious to one of ordinary skill in the art at the

time of the invention to make use of a public network to automate a previously manual

activity. The use of technology is efficient and saves time and money.


69.     Regarding claim 61, Willard teaches wherein the gateway processing sends an

acknowledgement to the financial institution (¶ 43-50).


## Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to JAMIE H. SWARTZ whose telephone number is

(571)272-7363.  The examiner can normally be reached on 8:00am-4:30pm Monday-

Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kambiz Abdi can be reached on (571)272-6702.  The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

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you have questions on access to the Private PAIR system, contact the Electronic

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


/J. H. S./
Examiner, Art Unit 3684
/Susanna M. Diaz/
Primary Examiner, Art Unit 3684